MEADE COUNTY

TRANSPORTATION PL.

Prepared for:

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Department of Equalization and Planning
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FHU Reference No. 07-043

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I. INTRODUCTION

A. Background

Located in the southwest portion of the state of South Dakota, Meade County has recently experienced increasing growth and development. This growth is expected to continue. While current activity and future growth expectations are concentrated within the Interstate 90 (I-90) Corridor, the County seeks to provide for the transportation needs of both its rural and urban residents. In an effort to plan and prepare in advance for future growth and its associated travel demands, the County has undertaken a process to develop a transportation plan.

The primary purpose of the County transportation system is to move people and goods in a safe and efficient manner. A variety of different travel demands need to be considered in order to fulfill this purpose, including travel within the County, passing through the County, and between rural parts of the County and the County's cities. The County roadway system is currently the key element of the transportation system in that it accommodates the majority of the travel needs outside city limits. It is important to develop a transportation plan which will enable the County to maintain a system that will satisfy the travel needs of County residents.

The County roadway network has historically been designed and constructed to serve rural and regional needs. Arterial and local roads were constructed in conjunction with low density development patterns resulting in a disjointed transportation network. Ongoing growth and development in the County is creating an increase in traffic demands on this roadway network that is not easily accommodated. The Annual Sturgis Motorcycle Rally further heightens travel demand in the southwest portion of the County and strains the capacity of the existing roadway network.

The County's ability to construct roads is constrained due to lack of funding. A majority of the County's roads and bridge budget is currently used for maintenance and repair of existing roads. These maintenance costs are directly attributable to the high number of road miles serving a large geographic area of somewhat low density and scattered developments.

B. Purpose of the Transportation Plan

It is the goal of the County to achieve a safe, efficient, and convenient transportation system that is well coordinated with existing land use activities occurring throughout Meade County and to allow for future planned growth.

Accordingly, the main purposes of this transportation plan are to:

1. Inventory and functionally classify the existing transportation network,
2. Identify roadway improvements to be made in the future,
3. Develop design standards for roadway improvements including access management, roadway surface, and typical sections,
4. Identify funding sources for roadway improvements, and
5. Coordinate existin

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- development of a
- layout of roadway
- a comprehensive
- a prioritized list of

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II. EXISTING COUNTY PLAN AND PROCEDURES

A. Existing Ordinances

Meade County Ordinance 10 provides street and roadway information. The original Ordinance 10 was adopted in 1989 and provides information on roads designated to be maintained by Meade County. Ordinance 10 was updated in 2008. Ordinance 20, the County's subdivision ordinance, was first adopted in 1998 and its 9th and most recent revision occurred in June of 2007. It provides regulations for the subdivision of land, development, and improvements.

The following sections summarize the historic practices of Meade County within the components of the plan. It is important to note that the current Meade County ordinances related to roadways were being revised as this plan was written and the information in this plan will be used to refine the ordinances.

B. Roadway Network

Ordinance 20 (http://www.meadecounty.org/FileGallery/444.pdf) historically defined a street as "…a tract of land dedicated to public use, which affords the primary means of access to the abutting property, but excluding private driveways serving only one (1) parcel of land." The ordinance further defined five street classifications as outlined in **Table 1**.

Table 1. Existing Meade County Functional Classification Roadway Definitions

Roadway Classification	Previous Ordinance 20 Definition
Thoroughfare	Arterial streets used primarily for heavy traffic and serve as an arterial traffic way.
Collector	Streets that carry traffic from minor streets to the major systems, thoroughfares, highways, and the principal entrance streets of high density residential and commercial lots.
Marginal Access	Streets which are parallel and adjacent to thoroughfares and highways and which provide access to abutting properties and protection from through traffic.
Minor	Minor streets are those which are used primarily for access to abutting properties.
Private	Private right-of-way affording access by pedestrian and vehicles and not dedicated to public use.

Characteristics such as roadway continuity, service between major origins/destinations, relative trip length, intersection spacing, and daily traffic are typically used to define roadway functional classification. These elements were partially addressed in the Ordinance 20 definitions. Additional detail would serve to clarify Meade County roadway classifications.

Though County Ordinance 20 had previously defined the functional classifications in **Table 1**, there was no formal functional classification plan in place. Such a plan assigns each roadway a functional classification.

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F. Capital Imp

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III. EXISTING TRANSPORTATION CONDITIONS

A. Roadway Conditions

There are currently 2,034 roadway lane-miles within Meade County. The roadway network includes a portion of Interstate 90 and South Dakota State Highways 79, 34, 73. United States Highway (US) 212 extends east-west along the north edge of the County and US Highway 14A extends west from Sturgis. The Interstate 90 (I-90) Corridor extends generally north-south within the southwest portion of the County, between the Cities of Sturgis and Black Hawk. A roadway map of Meade County is shown on **Figure 1**.

Travel Lanes

The majority of roads within Meade County provide 2 travel lanes (one in each direction). Interstate 90 is a 4-lane roadway and a 4-lane segment exists along State Highway 34 east of Sturgis.

Roadway Surface Types

Figure 2 illustrates the surface conditions (paved versus unpaved) of the Meade County roadway network, as well as the roadway width ranges for the paved roadways. All State Highways in the County are paved. The majority of the County roads in the urban areas are paved, while many of the rural and mountainous roads are unpaved. Overall, approximately 25 percent of the roadway miles in the County are paved.

B. Traffic Volumes

A series of traffic counts were conducted on roadways within the County during the summer of 2007 with a focus on the more densely developed southwest portion of the County and I-90 Corridor. The daily traffic volumes are shown by area on **Figures 3a** through **3c**. As shown, traffic volumes throughout the County range between approximately 100 and 2,000 vehicles per day (vpd). The upper range of traffic volumes occur along roadway segments nearer to I-90 and Rapid City.

Also shown on **Figures 3a** and **3b** are traffic counts recorded during the Annual Sturgis Motorcycle Rally. Held in August, the Rally attracts more than 500,000 visitors to the Black Hills area within a one week time span. As shown, the Rally can increase typical traffic along County roadways by up to 5-6 times.

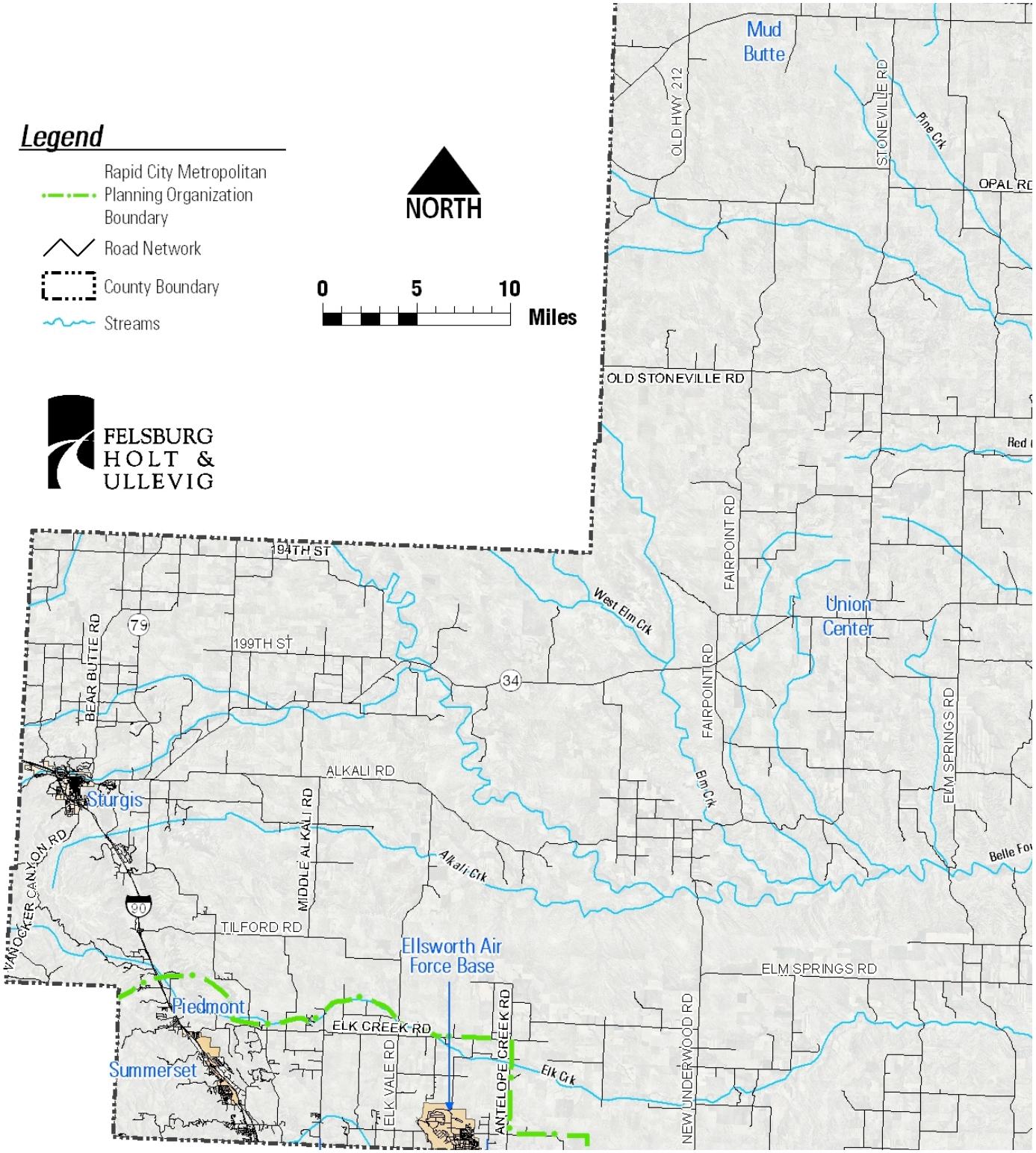
C. Traffic Safety

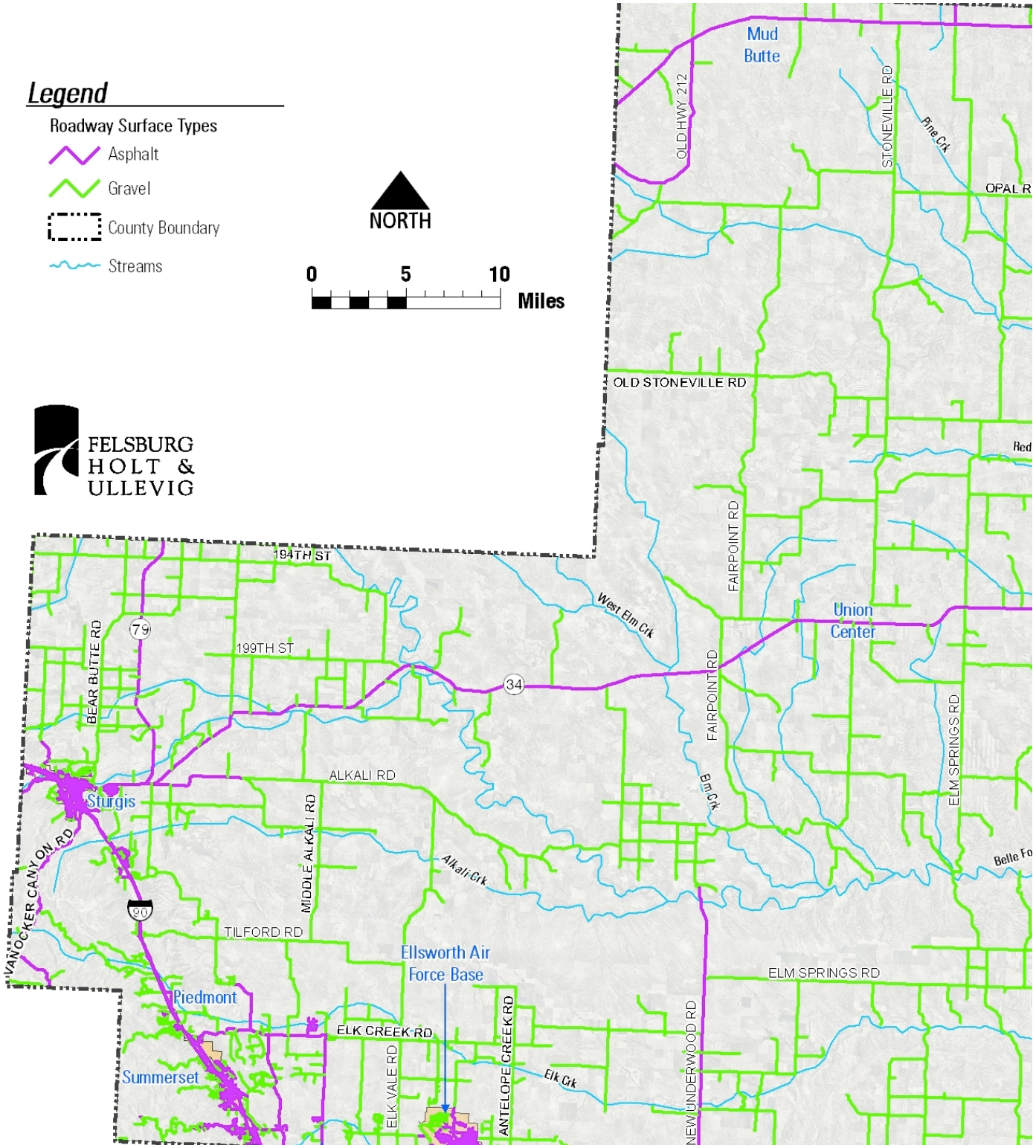
The following provides a summary of key statistics related to the 398 traffic crashes that occurred in Meade County between the Years 2004 and 2006. In addition to these statistics, it is noteworthy that 13 percent of crashes were influenced by alcohol or drugs, 20 percent of crashes were intersection-related and 72 crashes involved motorcycles. Of a typical 24-hour period, the most crashes occurred during the hour between 6:00pm and 7:00pm. Crashes that happened at night along unlighted roadway segments comprised approximately 37 percent of all collisions.

Sum

Crash Types
Angle – Intersection
Rear End
Head-on
Sideswipe same
Sideswipe opposite
Angle
Pedestrian/Bicycle
Animal
Fxd. object off road
Overturn on road
Overturn off road
Other
Total

Crashes by Month
January
February
March
April
May
June
July
August
September
October
November
December
Total


Legend
Rapid City Metropolitan Planning Organization Boundary
Road Network
County Boundary
Streams
NORTH
0
5
10
Miles
FELSBURG HOLT & ULLEVIG
Mud Butte
OLD HWY 212
STONEVILLE RD
Pine Crk
OPAL RD
OLD STONEVILLE RD
Red
FAIRPOINT RD
Union Center
West Elm Crk
194TH ST
199TH ST
BEAR BUTTE RD
79
34
ALKALI RD
Sturgis
MIDDLE ALKALI RD
Elm Crk
ELM SPRINGS RD
Belle Fo
Alkali Crk
VANOCKER CANYON RD
90
TILFORD RD
Ellsworth Air Force Base
ELM SPRINGS RD
Piedmont
ELK CREEK RD
ELK VALE RD
ANTELOPE CREEK RD
Elk Crk
NEW UNDERWOOD RD
Summerset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Roadway Surface Types
Asphalt
Gravel
County Boundary
Streams
NORTH
0
5
10
Miles
FELSBURG HOLT & ULLEVIG
Mud Butte
OLD HWY 212
STONEVILLE RD
Pine Crk
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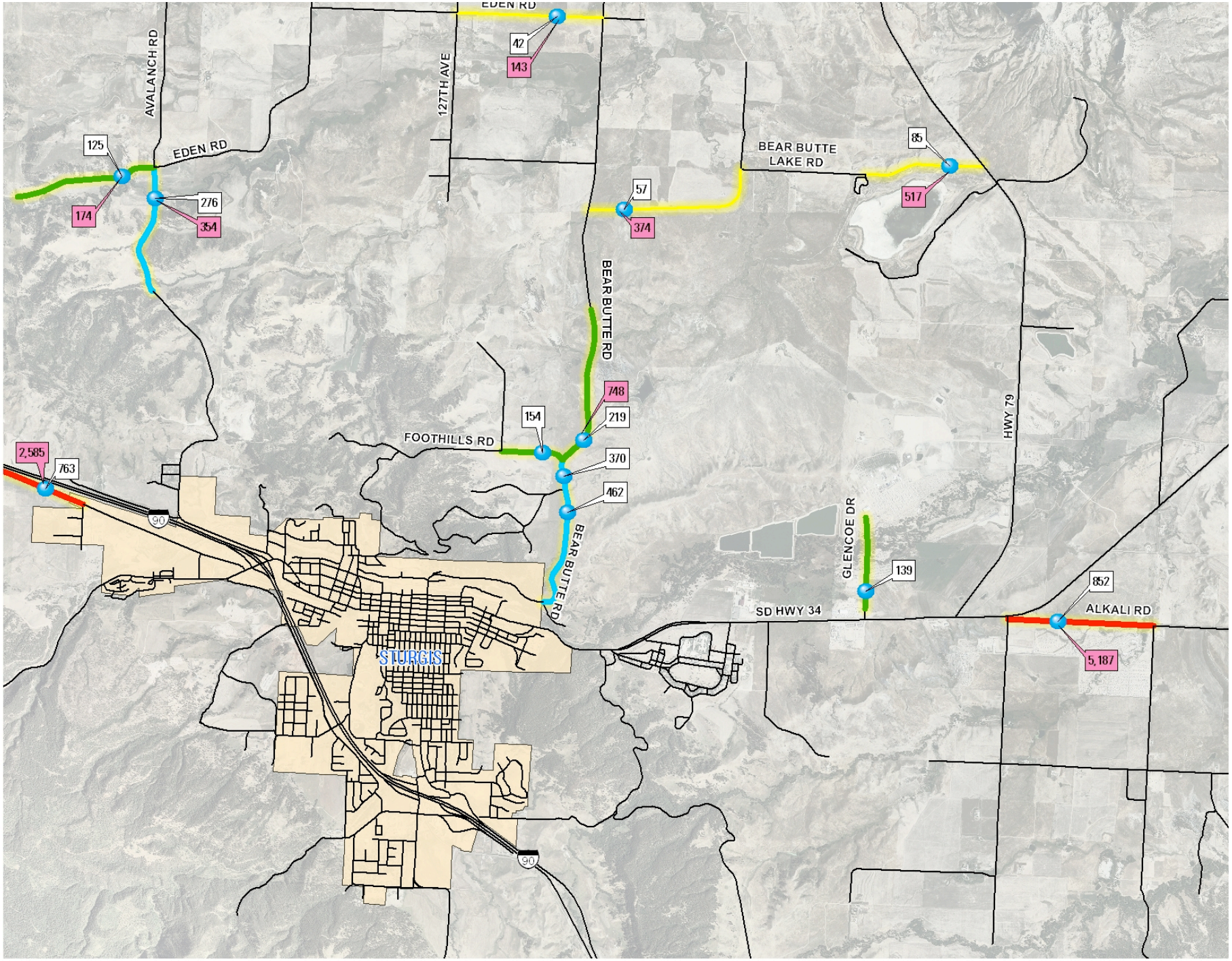

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Average Daily Traffic Counts 100 - 250 1000 - 2000

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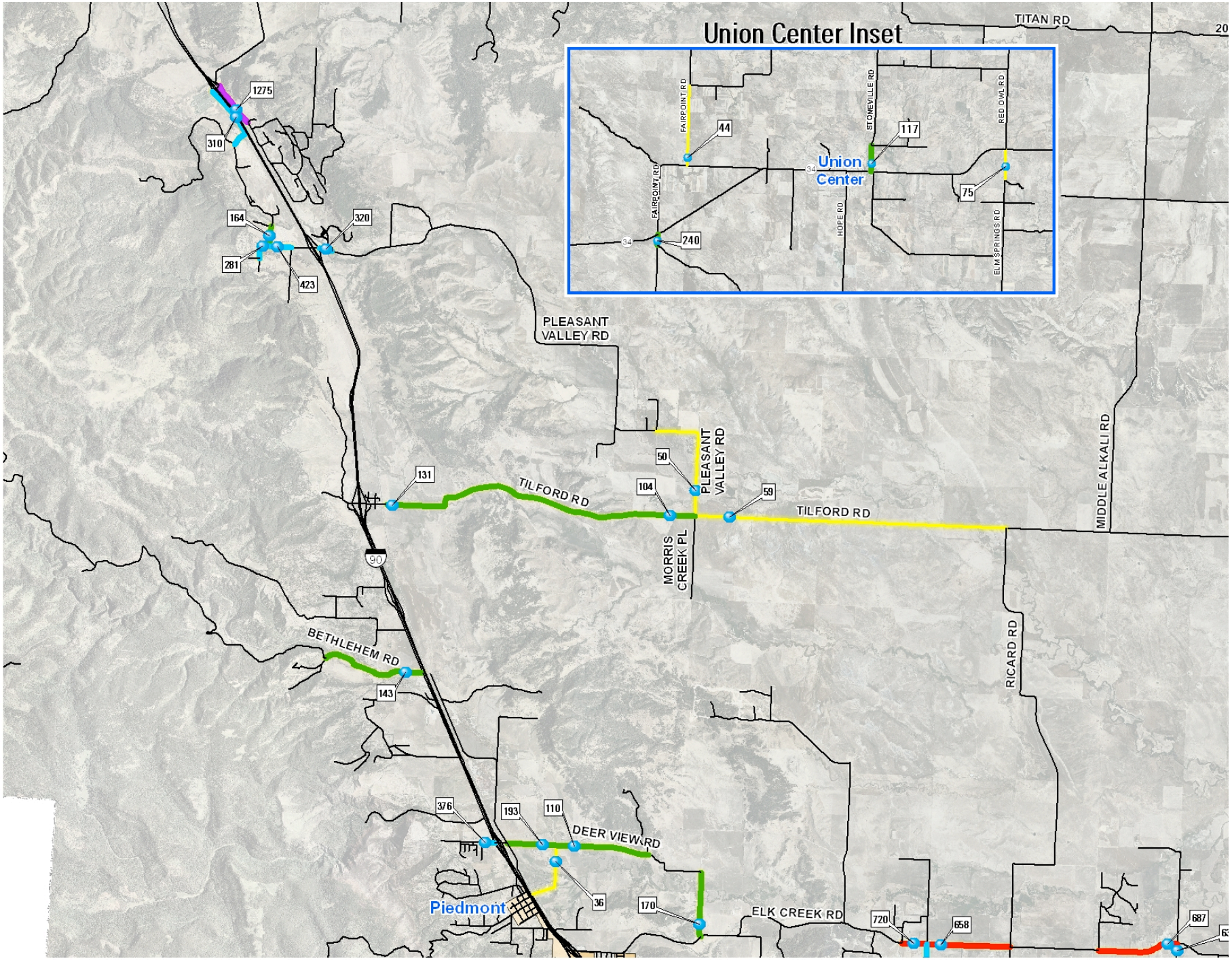

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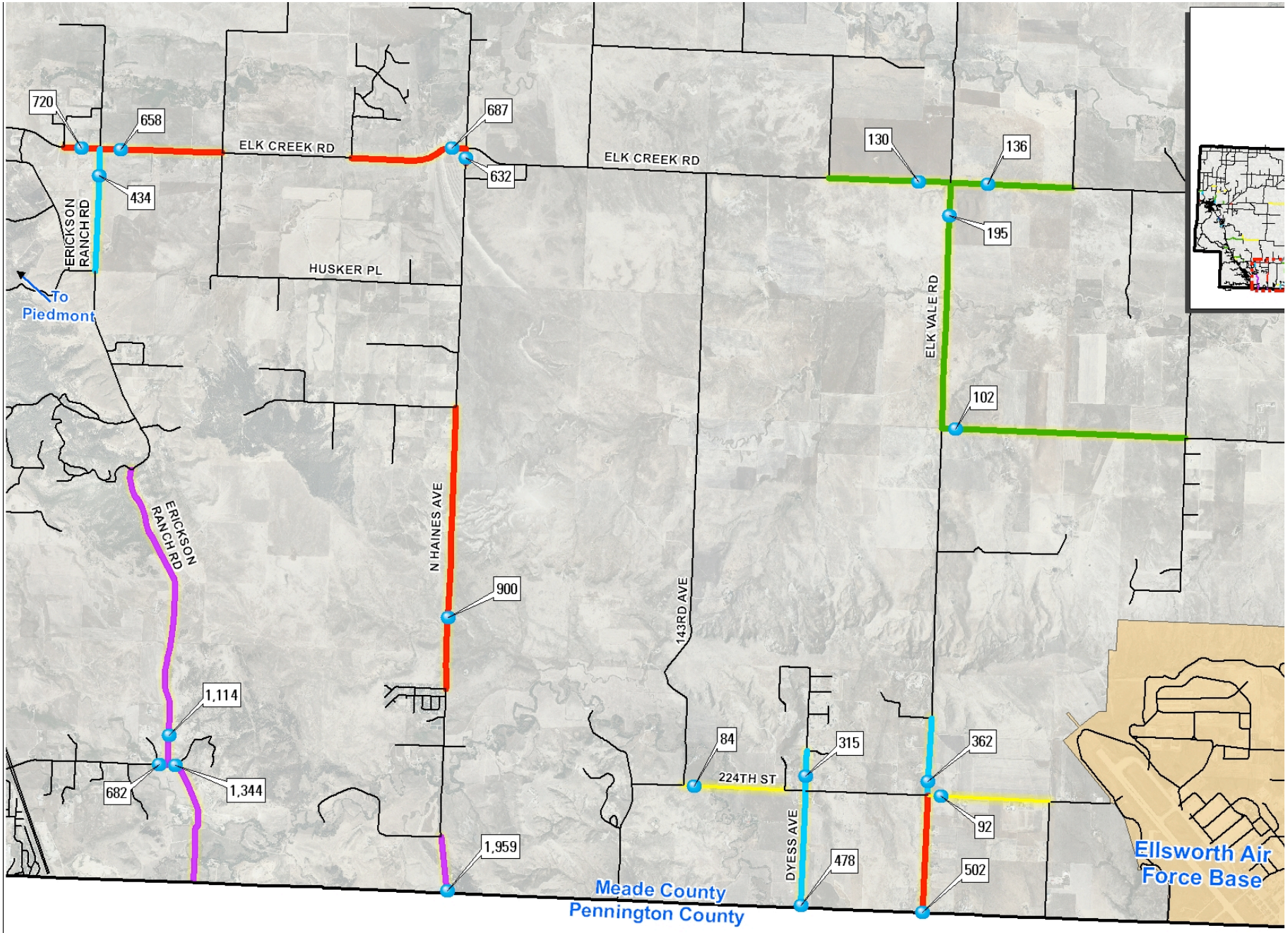
Average Daily Traffic Counts 100 - 250 1000 - 2000



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Average Daily Traffic Counts: 100 - 250; 1000 - 2000

IV. FUTURE TRANSPORTATION CONDITIONS

A. *Future Growth Rates*

A number of resources were consulted to develop appropriate future growth rates to apply to existing County traffic volumes. These are briefly summarized below:

County Population

A review of Meade County population growth between 1990 and 2005 indicated an annual growth rate of approximately 0.8 percent (www.city-data.com/county/Meade_County-SD.html). This rate is roughly consistent with the issuance of new County building permits over the same time period.

South Dakota Department Of Transportation (SDDOT) Growth Rates

The SDDOT provides 20-year growth factors for all state highways. Information for Meade County (updated in the Year 2006) is summarized in **Table 2**.

Table 2. SDDOT State Highway Growth Rates

State Highway	Annual Growth rate
SD 73	1.7 %
SD 79	1.3 %
SD 34	1.7%
I-90	2.4%

I-90 Corridor Preservation Study (Felsburg Holt & Ullevig, 2004)

This study included growth projections for interchanges 34-48 along I-90. The growth rates were based on growth in traffic observed between 1998 and 2003, then adjusted based on future expectations. Rates are summarized in **Table 3**. In addition to the information in **Table 3**, historical traffic counts indicated that mainline I-90 traffic volumes grew at 3 percent annually between 1989 and 2003.

Table 3. 2004 Corr

Interchange	Annu Rate
#34	2
#37	3
#40	3
#44	2.0%
#46	3.0%
#48	3.0%

Annual growth rates from

Based on growth rate sou determined that a range o future traffic forecasts for were designated based o growth rates used for eac counts to develop Year 2 provide a typical 20-year

Table 4. Meade C

Growth Area Type
High
Medium
Low

B. *Future Grou*

Figure 4 depicts High, M categorized based on rec expectations are for the I- expected to provide addit

Figure 4. Future Growth Areas

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= High Growth Are

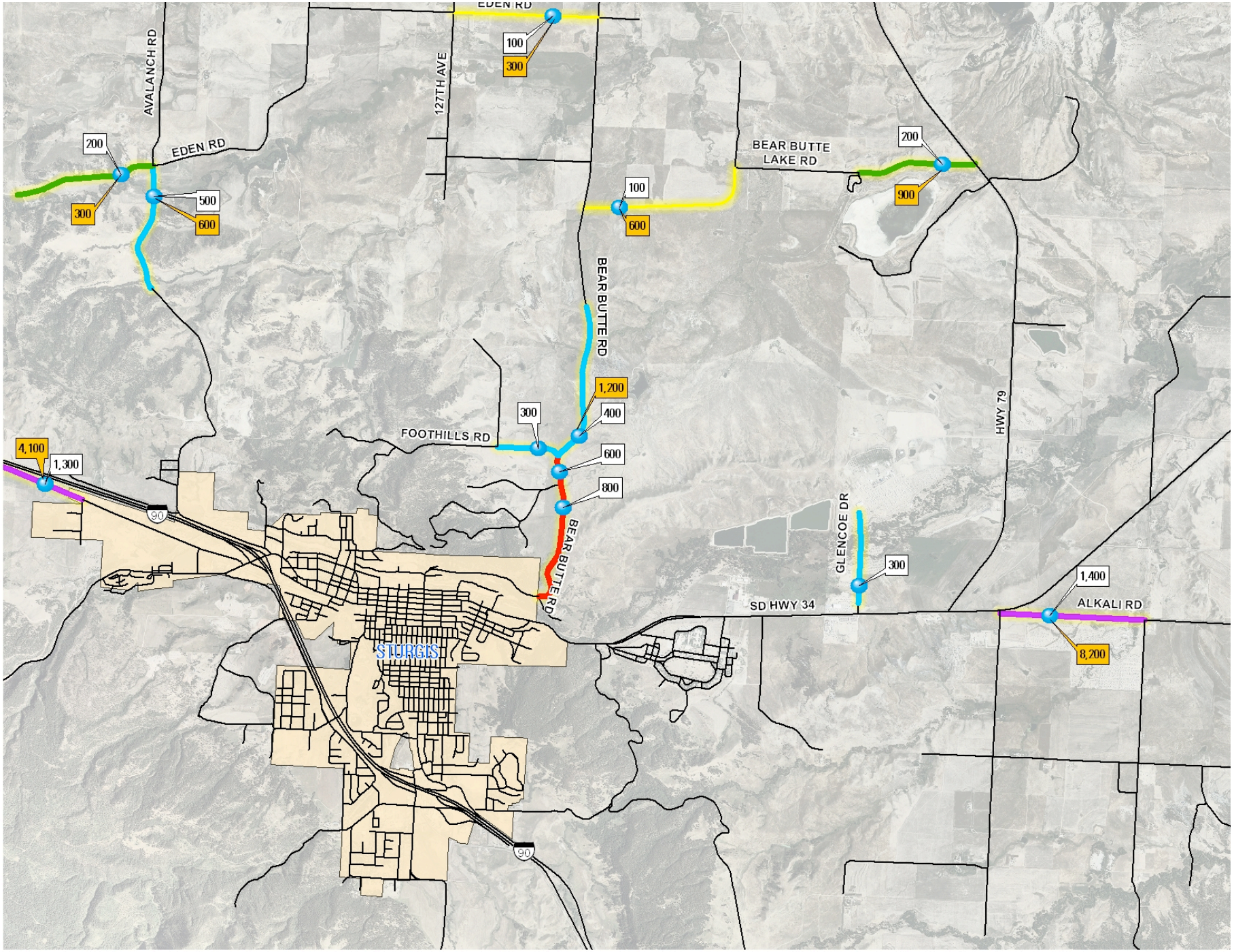
= Medium Growth

= Low Growth Area

C. Traffic Volume Projections

The high, medium and low growth factors in **Table 4** were applied to roadways within the growth areas shown on **Figure 4** to develop the Year 2030 traffic volume projections shown on **Figures 5a** through **5c**. Rally traffic counts were also increased using the same growth factors to account for future growth in Rally traffic. Future growth is anticipated to bring Alkali Road east of Highway 34, Elk Creek Road east of Deerview Road, and Dyess Avenue and Elk Vale Road south of 224th Street above 1,000 vehicles per day (vpd).

Growth in traffic volumes along some gravel Meade County roadways may trigger the decision to pave. Data provided by the SDDOT indicates that it is economically viable to consider paving roadways that carry in excess of 660 vpd. Surface treatment is considered along gravel roadways carrying in excess of 200 vpd. According to Year 2030 traffic projections, paving decisions may be needed along Bear Butte Road between Sturgis and Foothills Road, Pleasant Valley Road east and west of I-90, and Antelope Creek Road north of the Pennington County Line.



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2030 Average Daily Traffic Counts

- No ADT Data
- 100 - 250
- 250 - 500
- 1000 - 2000
- ADT Measurement Locations

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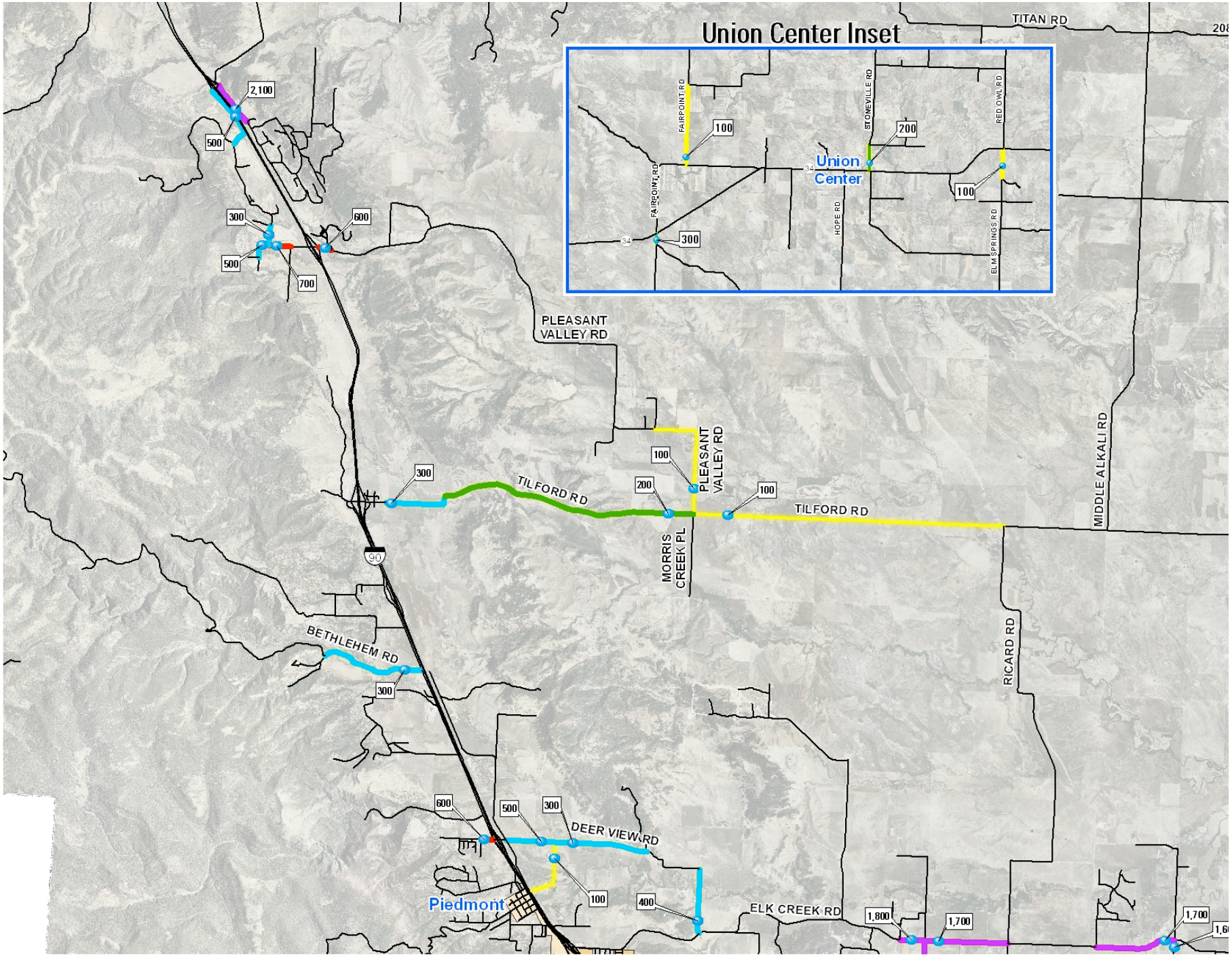

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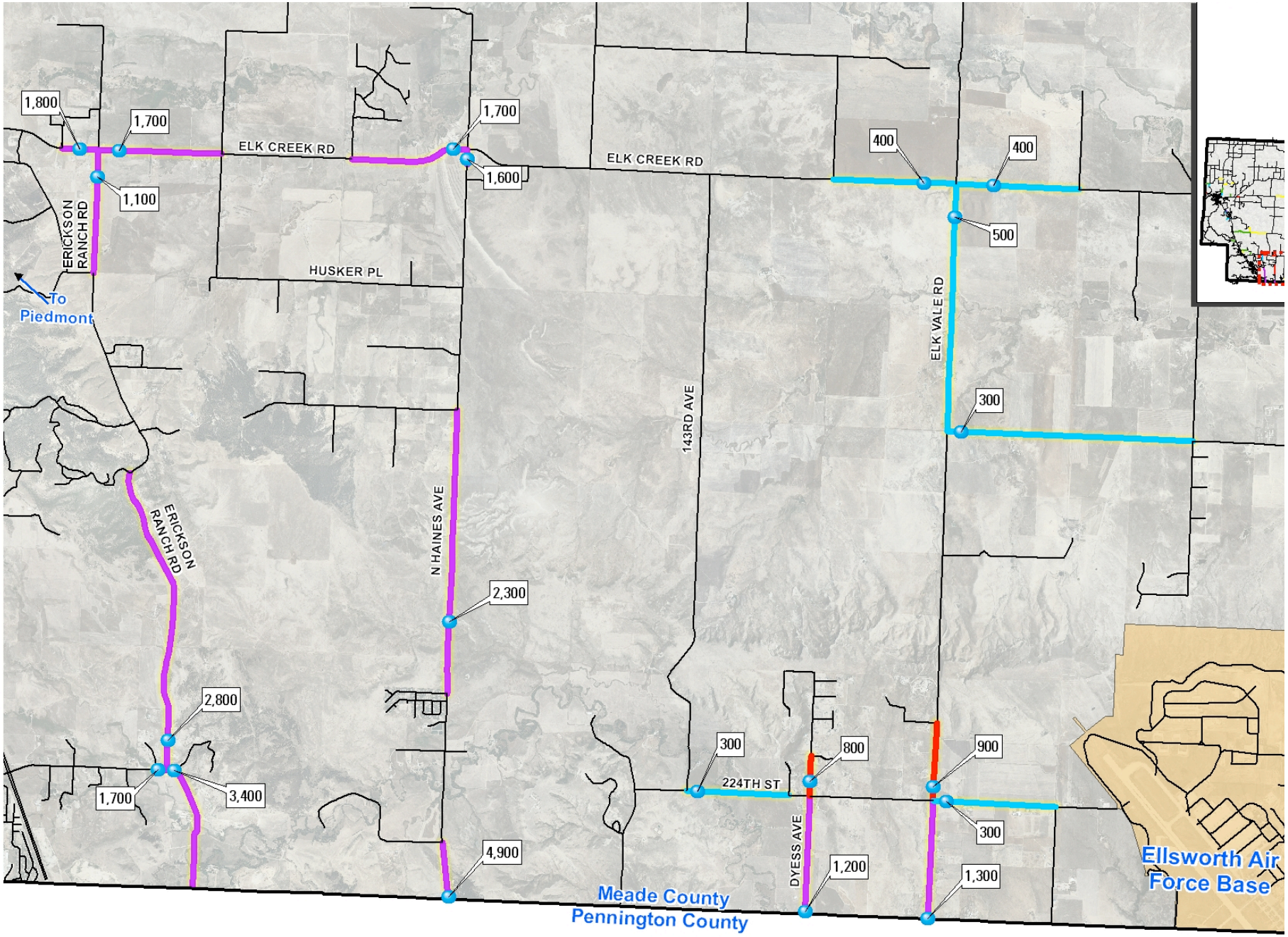
2030 Average Daily Traffic Counts 100 - 250 1000 - 2200



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2030 Average Daily Traffic Counts 100 - 250 1000 - 4900

V. FUNCTIONAL CLASSIFICATION

A roadway network is comprised of a hierarchy of roads whose functional classification is defined by their usage. In general, streets serve two functions: they provide mobility and access. Roadway classification is determined by the relative degree to which a road serves mobility versus access functions, as well as characteristics such as continuity, trip lengths served, travel speeds, and traffic volumes. Following are descriptions of different roadway types in Meade County:

A. Federal and State Highways

Much of the primary regional roadway system in Meade County consists of roads that are maintained by the federal or state governments:

- **Interstate 90 (I-90)** is the County's only Freeway, defined by high speeds and access provided by widely spaced, grade-separated interchanges. I-90 passes through the southwest portion of the County as part of the east-west interstate route connecting across South Dakota and the northern United States.
- **U. S. Highway 212 (US 212)** is the County's other Federal Highway, passing near the northern County border. It extends east and west through South Dakota.
- **State Highways** in the County include segments of the east-west State Highway (SH) 34 and segments of the north-south SH 79 and SH 73.

B. Arterial Roads

Arterial roadways are County or municipally maintained mobility roads that carry longer-distance trips for regional, inter-community and major commuting purposes. Arterials have a limited number of at-grade intersections and only provide direct property access when lower classification street access does not exist. Arterials can carry significant traffic volumes at higher speeds for longer distances and are seldom spaced at closer than one-mile intervals.

Urban Arterials

Arterial roads in the more developed areas in and around Sturgis and Piedmont are classified as urban arterials. Urban arterials have or are planned to have two travel lanes in each direction and have curbs, gutters, and sidewalks on each side.

Rural Arterials

Arterial roads in less developed parts of the County are classified as rural arterials. Rural arterials have shoulders on the edges rather than urban curb, gutter and sidewalk treatments,

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D. Local Roads

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Figures 7b and **7c**.

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F. Local Jurisd

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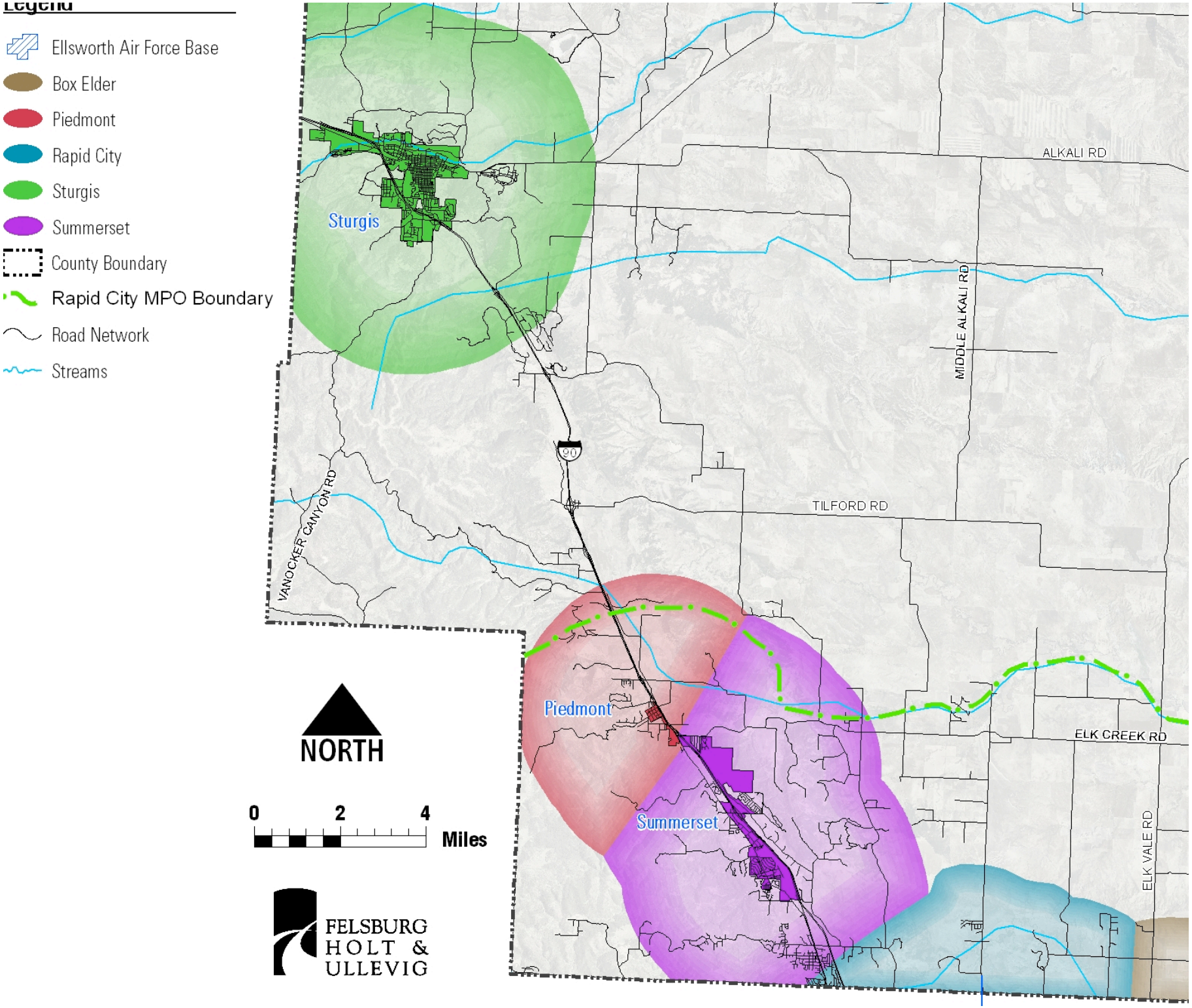
Functional classification r


Legend
Ellsworth Air Force Base
Box Elder
Piedmont
Rapid City
Sturgis
Summerset
County Boundary
Rapid City MPO Boundary
Road Network
Streams
Sturgis
Piedmont
Summerset
ALKALI RD
MIDDLE ALKALI RD
TILFORD RD
VANOCKER CANYON RD
ELK CREEK RD
ELK VALE RD
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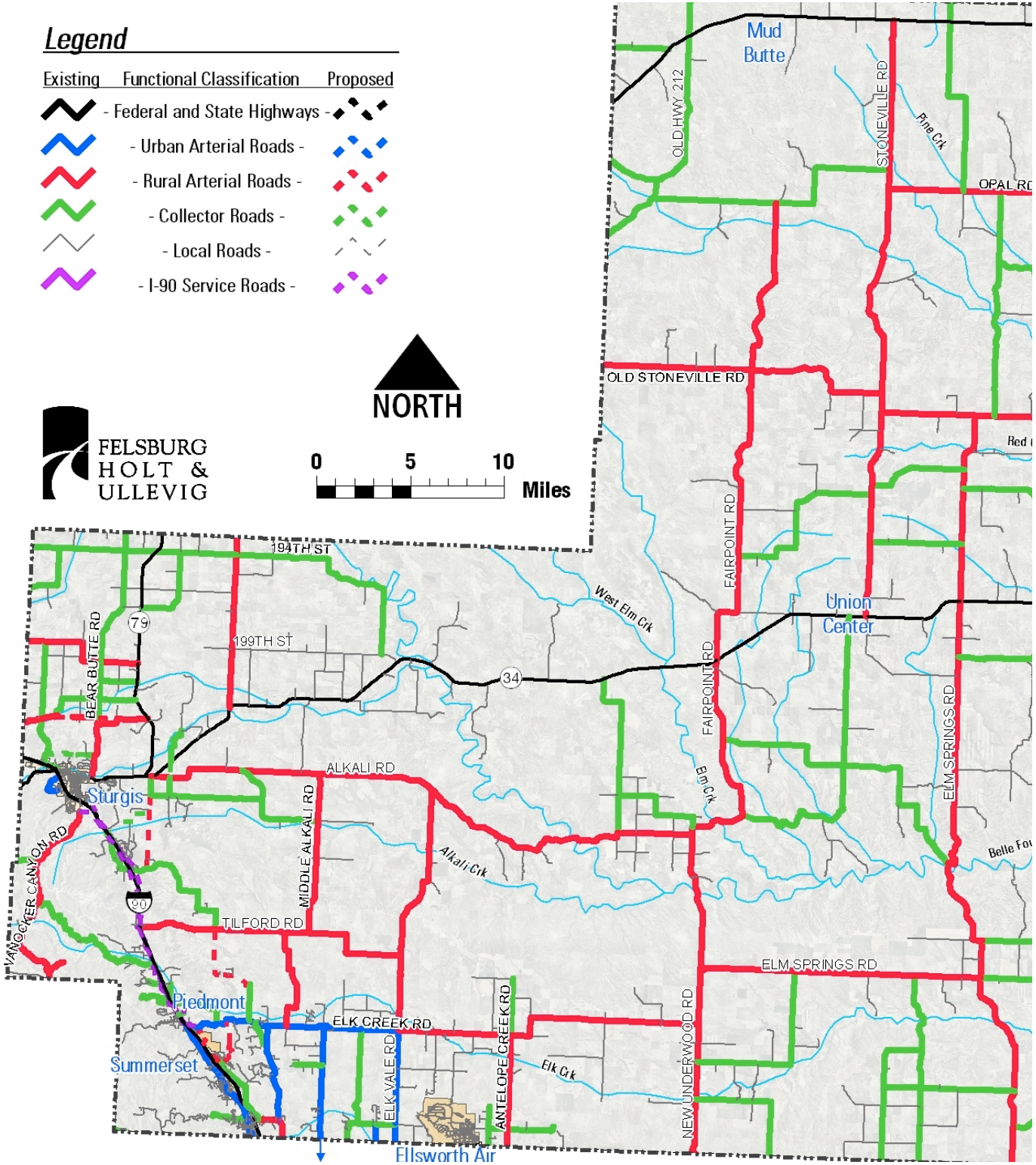
ULLEVIG


Legend
Existing
Functional Classification
Proposed
- Federal and State Highways -
- Urban Arterial Roads -
- Rural Arterial Roads -
- Collector Roads -
- Local Roads -
- I-90 Service Roads -
NORTH
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Miles
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OLD HWY 212
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Pine Crk
OPAL RD
OLD STONEVILLE RD
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FAIRPOINT RD
Union Center
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Alkali Crk
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ANTELOPE CREEK RD
NEW UNDERWOOD RD
Summerset
ELK VALE RD
Elk Crk
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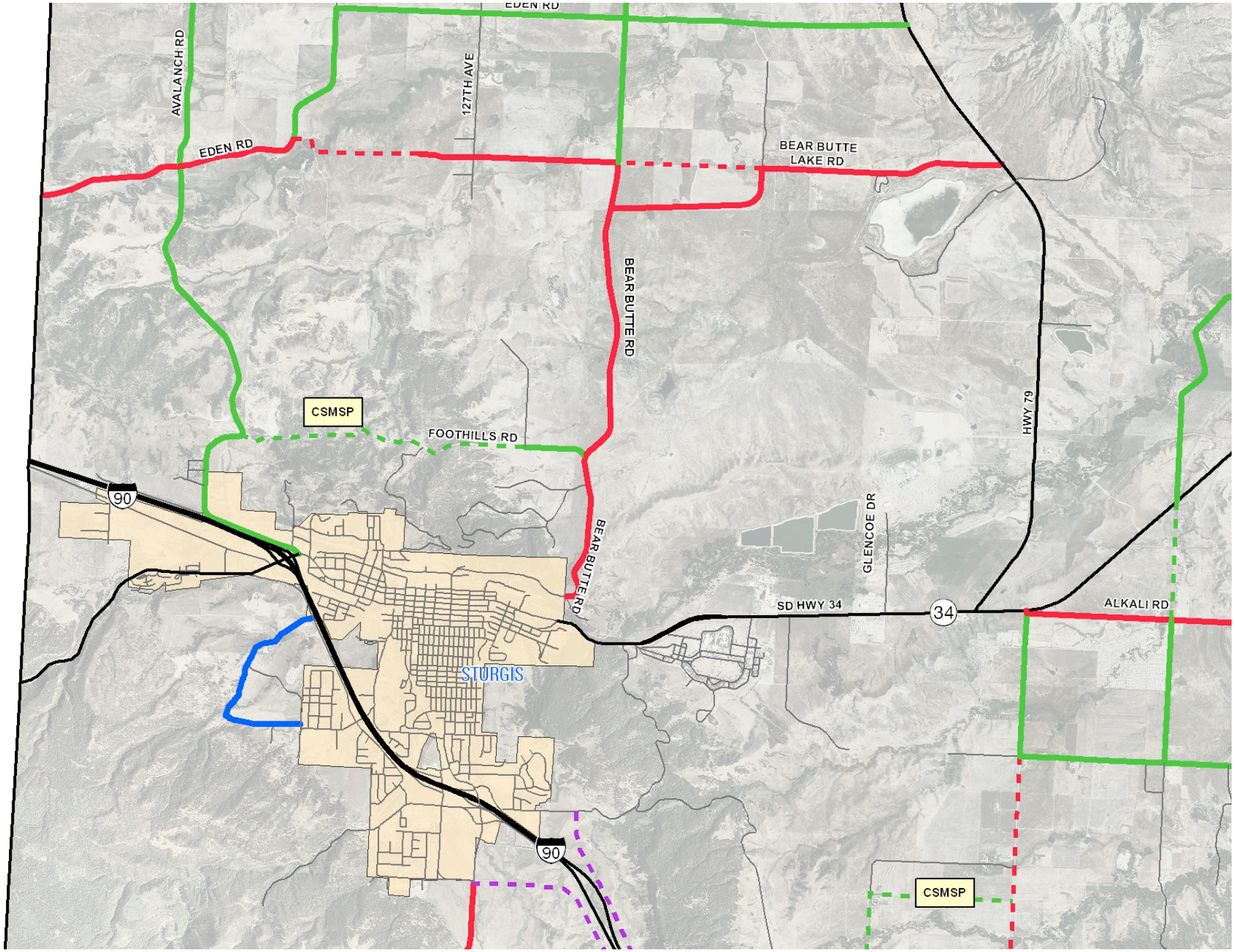

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Functional Classification

- 1 - Federal and State Highways
- 2 - Urban Arterial Roads
- 4 - Collector Roads
- 5 - Local Roads
- 6 - I-90 Service Roads
- 9 - Proposed Rural Arterial Roads
- 10 - Proposed Collector Roads
- 12 - Proposed I-90 Service Roads

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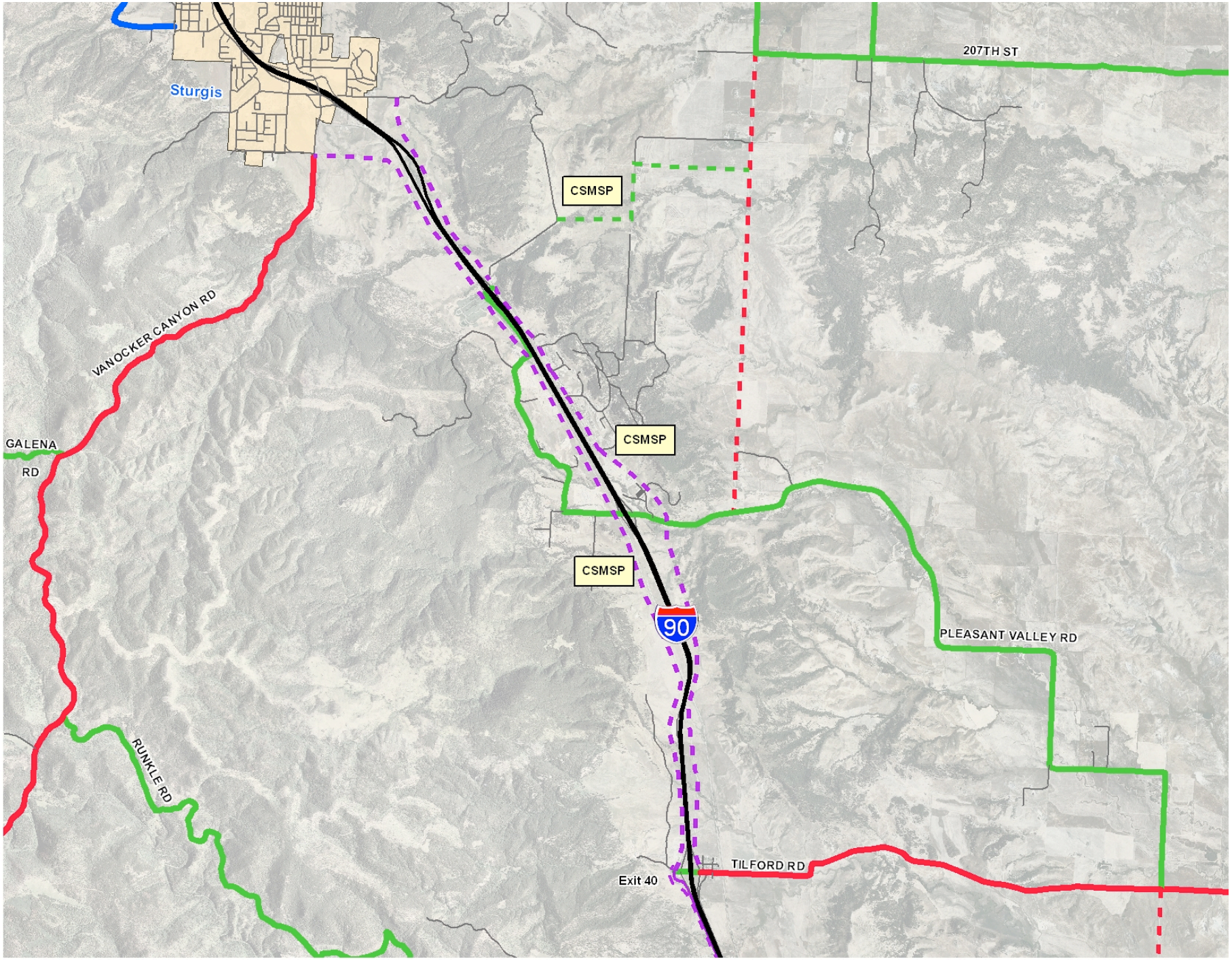

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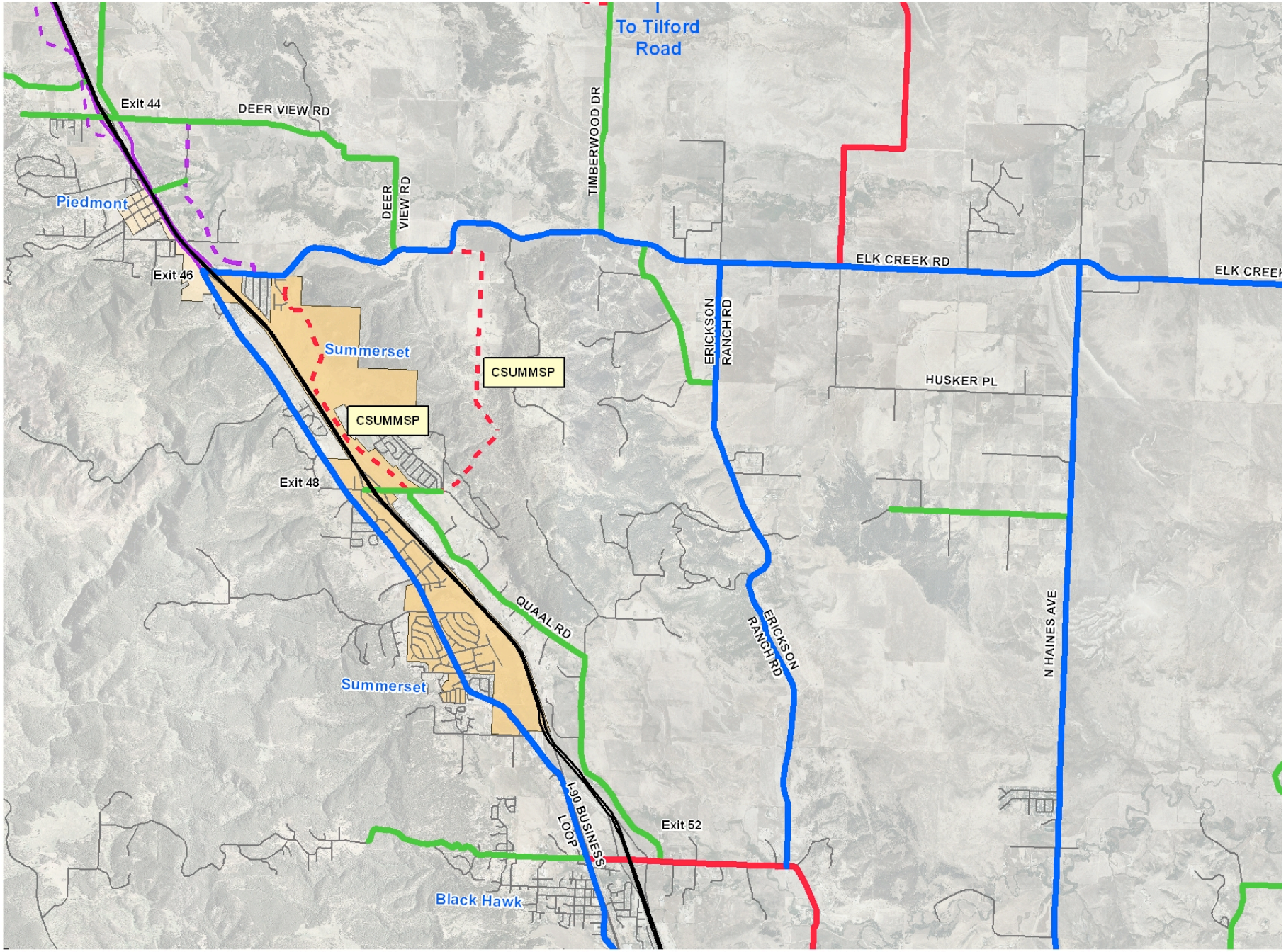
Functional Classification

- 1 - Federal and State Highways
- 4 - Collector Roads
- 5 - Local Roads
- 9 - Proposed Rural Arterial Roads
- 10 - Proposed Collector Roads

Figure 7d: Roadway Functional Classification – Black Hawk/Summerset/Piedmont Area



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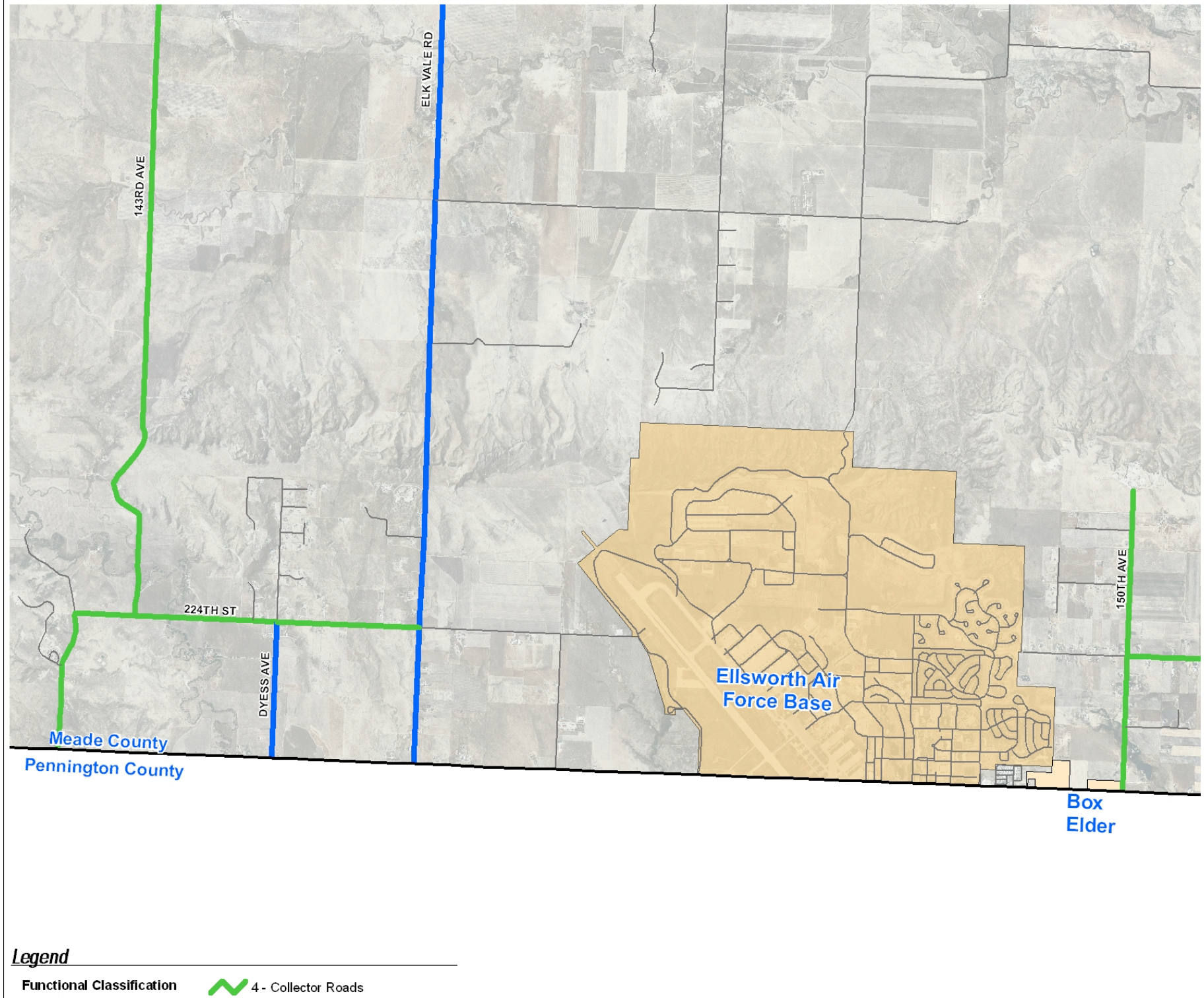
Functional Classification

- 1 - Federal and State Highways
- 2 - Urban Arterial Roads
- 3 - Rural Arterial Roads
- 4 - Collector Roads
- 5 - Local Roads
- 6 - I-90 Service Roads
- 9 - Proposed Rural Arterial Roads
- 12 - Proposed I-90 Service Roads

CSUMMSP = Improvement shown in City of Summerset Master Street Plan

0 1 Miles

Figure 7e: Roadway Functional Classification – Box Elder Area



VI. ROADWAY DESIGN STANDARDS

A. Proposed Roadway Cross Sections

Figures 8 and **9** respectively depict typical cross-sections for Arterial and Collector roadways. These cross-sections would be used as a template for future roadway construction and improvements to existing roadways. For both Arterials and Collectors there are different cross-sections shown for roads in urban and rural areas. Urban cross-sections, for both Arterial and Collectors, include curbs, gutters and sidewalks adjacent to the travel lanes, while rural cross-sections have paved shoulders but no curb, gutter or sidewalk. Cross sections are also provided for rural unpaved (gravel) arterial and collector roadways. These are typical cross-sections; however, particular road segment cross-sections may vary depending on specific intersection improvements, topographical and environmental features, or roadside constraints.

B. Access Management Basis

As discussed earlier, approach permit applications are received and reviewed by the County and access is granted or denied on a case-by-case basis. The establishment of access management guidelines is intended to guide the County in determining allowance of access to a particular property, and under what circumstances or restrictions that an access might be allowed. The guidelines are not intended to be a full comprehensive access manual, but rather some principles to determine if access would be allowed and references to determine the need for auxiliary turn lanes. It is recognized that County staff would look at each access on a case-by-case basis to determine any need for acceleration/deceleration lanes.

Approach permit applications will continue to be required for gaining access to any County roadway. A permit application will also be required when there are changes to the property that increase the traffic volume to the site by 20 percent or more.

The need for acceleration/deceleration lanes would be evaluated based on the projected peak hour traffic volume turning into and out of the proposed access and the traffic volume passing the access on the main street. Chapter 12 of the South Dakota Department of Transportation Road Design Manual (http://www.sddot.com/pe/roaddesign/docs/rdmanual/rdmch12.pdf) provides graphs that may be used to determine whether left turn or right turn lanes are warranted.

The turning traffic volume is closely related to the type and magnitude of development projected to utilize the proposed access. A traffic impact study completed for proposed development would include projected peak hour traffic volumes and would identify turn lane requirements based on traffic volume projections.

The access management guidelines need to be sensitive to the environmental nature of the various roadway classifications. Ideally, the policy should be most restrictive along arterial roads since these roadways provide the greatest function of mobility, and it should be the least restrictive on local roads which are intended to provide access to adjacent properties. Further, rural roads tend to have a greater mobility function than those in developed areas for a given roadway classification, and the policy needs to recognize this difference between developing area roads and rural roads.

The access guidelines sh
access consideration. Th
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attempt to apply these gu
access request that signi

Developing Areas

Arterial roadways should
adjacent properties is far
especially local streets sh
but maintaining mobility a
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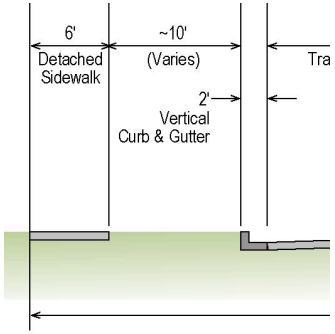
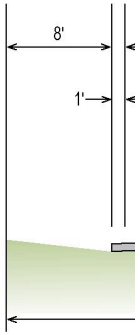
one quarter-mile from sec
to grade and sight distanc
access or if the property f
be provided, but serious c
granted to an arterial stre
with neighboring propert

Collector streets in devel
desirable to ensure that a
minimum spacing criterio
minimum spacing criteria
than once or twice a mon

Figure 8. Typical Roadway Sections – Arterials





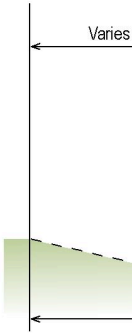
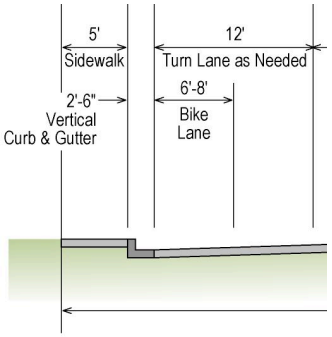
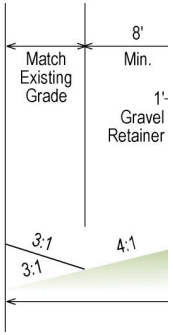


Figure 9. Typical Roadway Sections – Collectors





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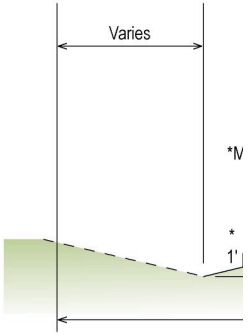

Rural Areas

Similar to the developing areas, arterial roads should be the primary target to controlling access. However, collector roads and local roads tend to serve more of a mobility function in rural areas than they do in the developing areas. As such, an access management policy should be a bit more restrictive on these classifications within a rural setting. The arterial classification should still be subject to the most restrictive set of rules similarly to the developing area arterial roads.

To address potential access restrictions for rural collectors and locals, it is suggested to base driveway/intersection spacing information on sight-distance requirements. If two successive accesses are no closer than the distance of a driver's safe stopping sight distance, then the driver traveling the main road need only monitor one access at a time. Being required to monitor more than one access at a time adds to the complexity of the driving task, and should be avoided. As such, spacing of access along rural collectors and locals should be based on the design speed and stopping distance of these roadways within rural areas. The spacing need not be strictly enforced for those rarely used accesses as previously mentioned. Roadway grade and entering sight distance should be a consideration when locating a driveway access.

The access management guidelines are intended to preserve the integrity of those roadways which are to provide a mobility function. The most restrictive criteria are applied to the arterial roadways. However, the local roads within the rural areas also provide some mobility and are subject to stricter access controls than their developing area counterparts. As such, separate access guidelines for local roads have been developed for developing areas and rural areas.

C. *Access Management Guidelines*

The following guidelines should be applied to access requests to the extent possible.

- **Arterial Roads** - Direct access to abutting land is subordinate to providing service to the through traffic movements. Access will normally not be granted to individual property which has a reasonable alternative means of access to a lower classification of roadway. Consideration of reasonable alternative access will take into consideration the function of the alternative roadway, its purpose, capacity, operation, safety, and means of improving the alternative roadway.

  Ideally, accesses should be limited to only arterial and collector cross-streets. Intersections with the potential for eventual signalization should be spaced at one-quarter-mile intervals based on section lines, where feasible and subject to the roadway's grade and to the driver's entering sight distance. Allowed accesses or intersections spaced at intervals other than one-quarter mile will be restricted to right-in/right out only unless an engineering study clearly demonstrates that there are benefits to allowing additional movements and that the access location would not be a significant detriment to the integrity of the arterial roadway.

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D. Roadway Surfacing Decisions

The decision to pave a gravel roadway is complex, requiring consideration of multiple factors. Several of these factors are identified in Appendix D of the Gravel Roads Maintenance and Design Manual (South Dakota Local Transportation Assistance Program, November 2000), available at www.epa.gov.owow/nps/gravelroads/. The document provides a ten part answer to the question of when to pave a gravel road. Based on a review of available resources (including the Manual) and discussion with the Meade County Transportation Committee, the following elements should be considered in making the decision to pave a gravel roadway.

- Daily traffic volumes and type of traffic along the roadway. Recent data from the SDDOT indicate that it is economically viable to provide surface treatment to gravel roads carrying in excess of 250-300 vpd. Roads carrying in excess of 660 vpd are typically reviewed to determine whether an alternate roadway surface should be considered. These thresholds have been established by the County based on economic analyses of the costs required to build and maintain each roadway surface type at different daily traffic levels.
- The continuity and functional classification of the roadway should be considered. Arterial roads should generally be paved before collector or local roads. As another consideration, a local street may be economically sealed or paved while a road with heavy truck usage may best be surfaced with gravel and left unpaved until sufficient funds are available to place a thick load-bearing pavement on the road.
- The tendency of drivers to divert away from gravel surfaces and onto paved surfaces to make their trip should be considered. If the new paved roadway would provide the first paved surface serving a particular demand pattern within Meade County, it should be designed to accommodate higher levels of traffic and routes leading to it may require some improvement to provide adequate traffic safety.
- Traffic safety should be addressed. Paved roads encourage higher travel speeds, and sight distance, curvature, lane width, surface friction and superelevation should be tailored to the anticipated travel speed. As stated in the Gravel Roads Manual, it makes no sense to pave a gravel road which is poorly designed and hazardous.
- It is important to build up the road base and improve drainage before paving. If water is not drained away from the road, the pavement fails.
- The decision to pave a gravel road is ultimately based on economic considerations. Accordingly, the South Dakota Department of Transportation (SDDOT) published a research report in June of 2004 intended to assist local governments with the roadway surfacing decision. The report provides a detailed cost model addressing the agency and user costs associated with various roadway surfaces. Available at (http://www.state.sd.us/Applications/HR19ResearchProjects/Projects/sd200210_Final_Report.pdf), this report may be used as a tool to evaluate agency costs. It is recommended that Meade County make use of this information in the roadway surfacing decision process. The Technical Brief associated with this research report is included in **Appendix B**.
- Public opinion should be weighed in the decision process and leaders should inform the public about the factors considered in the decision process.

VII. TRANSPORTATION IMPACTS / FINANCING

A. *Assessment of Development Impacts*

New development in the County generates new vehicle trips and associated new demands on the County's road system. The impacts of different developments vary from a small number of trips for a single new home to a large number of trips for a major residential subdivision or commercial development. Many counties and municipalities require applicants for major developments to submit a traffic impact study, estimating the number of trips expected to be generated, the expected distribution of those trips onto the surrounding road network, and identifying major road improvements needed to accommodate the traffic.

Jurisdictions typically establish a threshold for the size of development that would trigger the requirement to do a traffic impact study (TIS). The traffic volume thresholds shown in **Table 5** are recommended in consideration of the need for a traffic impact study:

Table 5. Traffic Impact Study Requirements

Daily Traffic Volume Generated by Proposed Development (Vehicle-trips per day)[1]	Study Requirements
1,000 or more	Traffic Impact Study Required
500-1,000	Traffic Impact Study may be required at the discretion of Meade County
Less than 500	Traffic Impact Study Not Required

[1] Daily Traffic Volume generated by development may be calculated based on proposed land uses using Trip Generation, Seventh Edition (Institute of Transportation Engineers, 2004). Using these rates, 1,000 vehicles per day corresponds to approximately 23,000 Square Feet of Shopping Center Retail or approximately 105 single-family detached homes.

B. *Financing Tools*

Different County roadway improvement types can be financed through a variety of different mechanisms. This section provides a brief overview of existing or potential funding mechanisms and their applicability to different improvement types.

Local Roads

Construction of local streets accessing single development is generally the responsibility of private developers who create the need for those streets and driveways.

Major Roads Adjacent to New Developments

New developments are generally required to construct or improve arterial and collector roads that are adjacent to the development. Roads would be constructed to the applicable road classification type and typical cross-section documented in this plan.

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VIII. ROADWAY CAPITAL IMPROVEMENT PROJECTS

A number of roadway improvements have been identified to provide additional roadway capacity and traffic safety within Meade County. These projects are anticipated to be constructed by the Year 2016. **Table 6** provides a listing of roadway improvement projects that are graphically depicted on **Figure 10**. A total of eleven projects have been identified, including paving, realignment, reconstruction and new roadway connection/extension projects. The project types are described as follows:

Roadway Paving Projects

Five segments of the County roadway system are included as asphalt paving projects, comprising 29.8 roadway miles.

Curve Realignment Projects

Three curve realignment projects are included in the set of improvements, totaling 4.4 miles in length.

New Alignments

The one proposed new roadway alignment/extension is 5.5 miles in length.

Reconstruction

The two roadway reconstruction projects total 2.2 miles.

IX. TRANSPC

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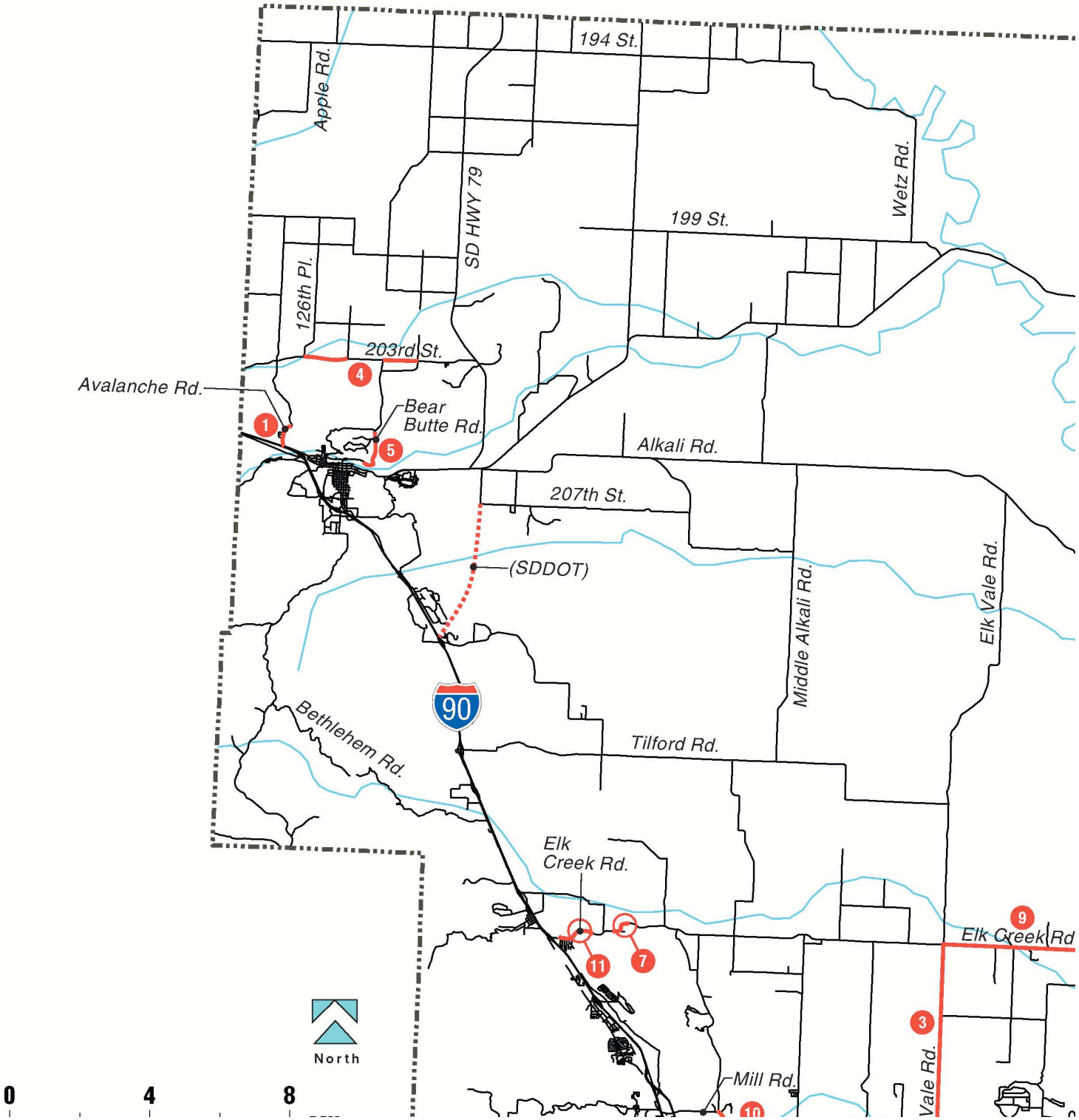
Table 6. Listing of County Roadway Improvement Projects

ID #	Corridor	From	To	Length (Miles)	Description
1	Avalanche Road	Sturgis City Limits	City Dump	1.2	Reconstruction and surfacing
2	150th Avenue	Pennington County Line	north	1.8	Asphalt Paving as minor arterial
3	Elk Vale Road	Pennington County Line	Elk Creek Road	6	Expand ROW to 100', pave roadway
4	North Loop Road	Highway 79	I-90 near Whitewood	5.5	New roadway connection and reconstruction of existing alignment
5	Bear Butte Road	Sturgis limits	Bear Butte Lake Road	1	Reconstruction
6	Antelope Creek Road	Pennington County Line	Elk Creek Road	6	Asphalt Paving
7	Elk Creek Road	Sunshine Valley Road (Reverse Curves)	Edgewood Place	3	Acquire Right-of-Way for Improvements Realignment of Roadway
8	New Underwood Road	215th Street	Highway 34	10	Asphalt Paving
9	Elk Creek Road	Elk Vale Road	Antelope Creek Road	6	Asphalt Paving
10	Deadwood Extension	Pennington County Line	Meade County Road 7	1	Realignment, widen bridge over Boxelder Creek
11	Elk Creek Road	Valley View	East side of Reverse Curves	0.4	Realignment of curves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126th Pl.
203rd St.
Avalanche Rd.
Bear
Butte Rd.
Alkali Rd.
207th St.
(SDDOT)
Middle Alkali Rd.
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APPENDIX A CITY AND TOWN FUNCTIONAL CLASSIFICATION MAPS

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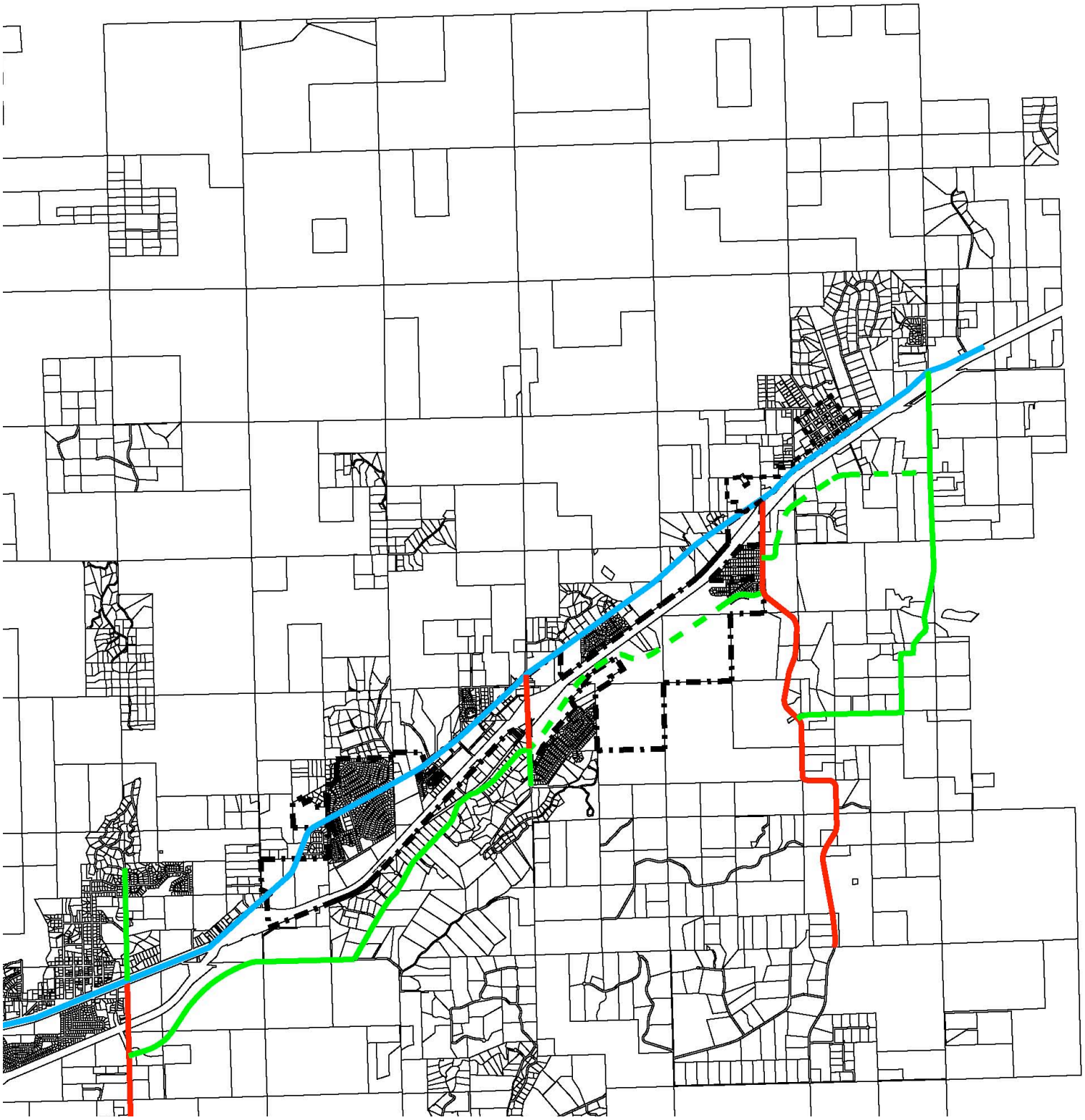

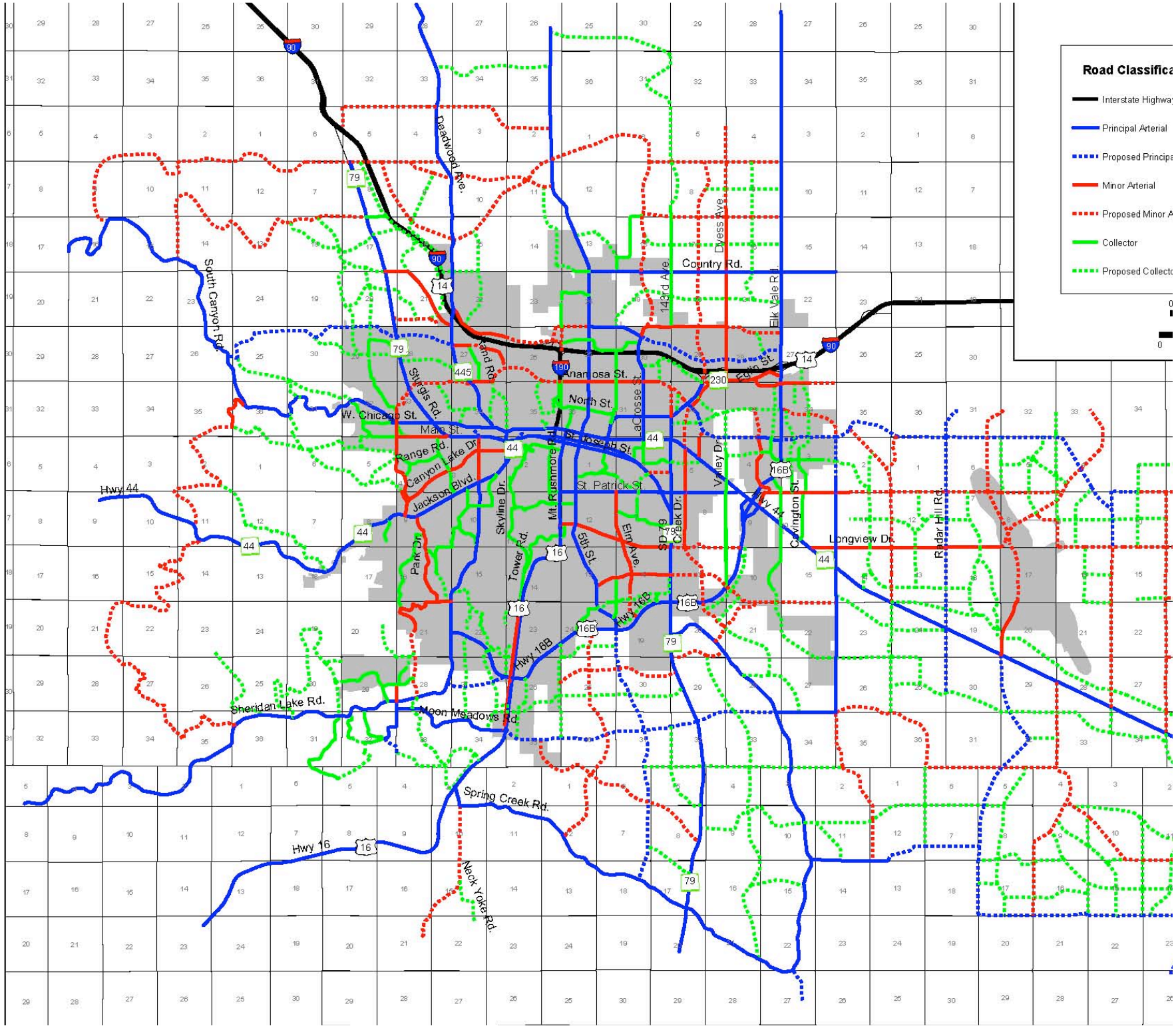
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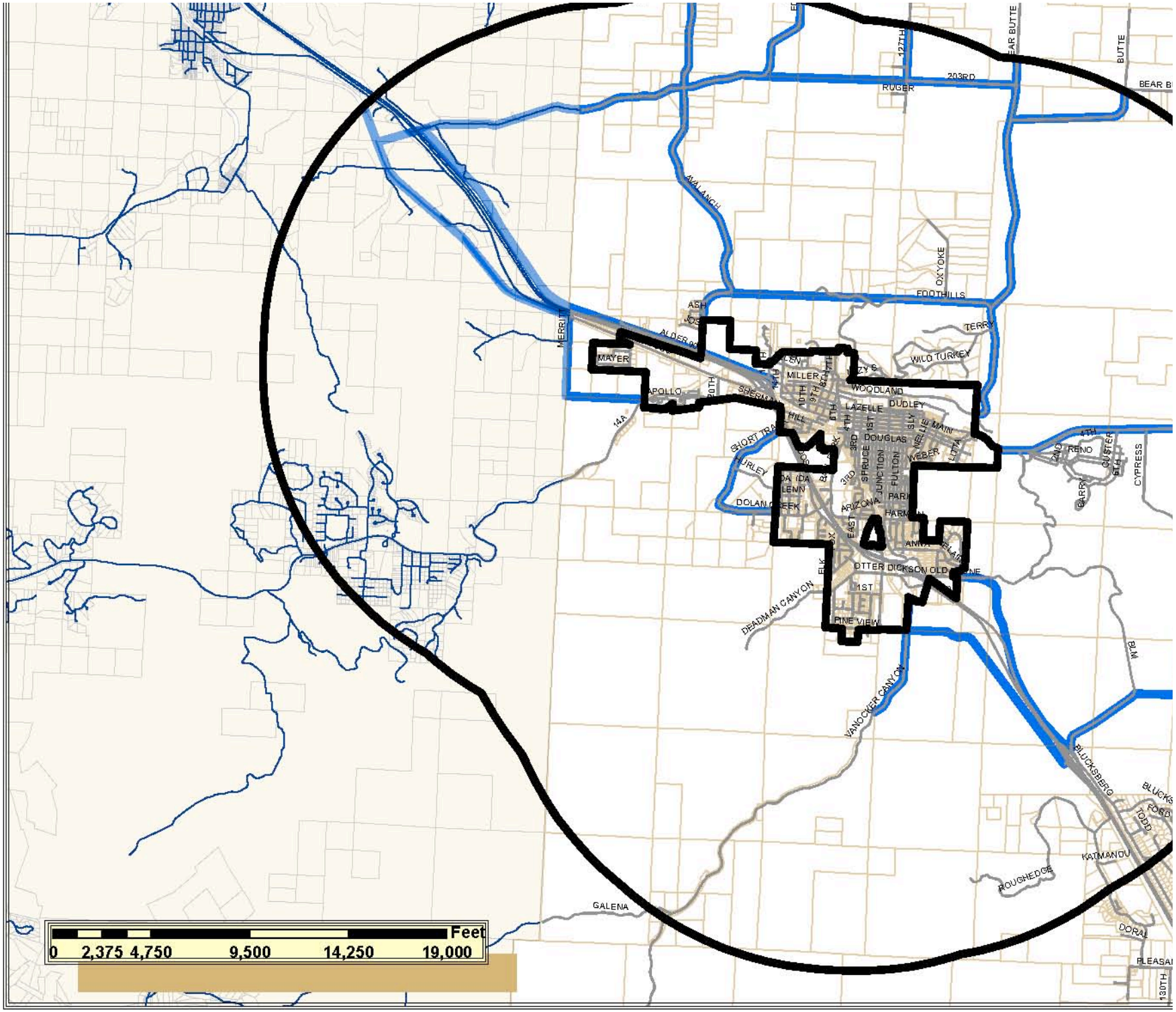
Canyon Lake Dr.
Jackson Blvd.
Hwy 44
Skyline Dr.
Mt. Rushmore Rd.
Tower Rd.
5th St.
Elm Ave.
Creek Dr.
Valley Dr.
Elk Vale Rd.
Dyess Ave.
143rd Ave
Edge St.
Covington St.
Longview Dr.
Radar Hill Rd.
Park Dr.
Hwy 16B
Sheridan Lake Rd.
Moon Meadows Rd.
Spring Creek Rd.
Hwy 16
Neck Yoke Rd.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DOUGLAS
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WEBER
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SHORT TRAIL
HILL
DURLEY
DOLAN CREEK
ARIZONA
HARMON
ANITA
OTTER
DICKSON
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PINE VIEW
DEADMAN CANYON
VANOCKER CANYON
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CUSTER
CYPRESS
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APPENDIX B TECHNICAL BRIEF-SDDOT LOCAL PAVING REPORT

(UNABLE TO CREATE APPENDIX B AS AN MS WORD DOCUMEN